



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,400	06/12/2006	Hans-Michael Graf	2004P04893	2368
24131 7590 06/12/2008 LERNER GREENBERG STEMER LLP P O BOX 2480 HOLLYWOOD, FL 33022-2480				
EXAMINER WILLIAMS, ARUN C				
ART UNIT		PAPER NUMBER		
2838				
MAIL DATE		DELIVERY MODE		
06/12/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/576,400

**Applicant(s)**

GRAF ET AL.

**Examiner**

ARUN WILLIAMS

**Art Unit**

2838

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
- Paper No(s)/Mail Date 4/20/2006, 5/30/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show ammeter, evaluation unit, and etc...(blank boxes) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**5. Claims 15-18, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Tegge et al.(Tegge), USPAT6,252,406.**

As for claim 24, Tegge discloses and shows in Fig. 1 a battery sensor, comprising: an ammeter (32) for determining a battery current, an evaluation unit (40), and a microprocessor (30), configured such that, during an idle phase in which main electrical consumers assigned to a battery are switched off: said microprocessor is

Art Unit: 2838

switched off; said evaluation unit is configured to determine, at given first time intervals, a test signal from said ammeter for a given first time duration, and to assign thereto first current values, said evaluation unit monitoring the values to check whether a first threshold current value has been exceeded and/or whether the current has dropped below a second threshold current value; when the current has exceeded the first current value or has dropped below the second threshold current value, said microprocessor is placed in a switched-on state and for a given second time duration, the test signal from said ammeter is determined by said evaluation unit and second current values are assigned thereto, the values then being evaluated in said microprocessor; said microprocessor initiating given procedures for maintaining the electric charge in the battery if a given condition depending on the second current values is met; and wherein the first time duration is shorter than the second time duration (Abstract & col.1-2)).

Claims 15-18 are implicit in the structure and they recite the same elements in a method format.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**9. Claims 19,20,25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tegge in view of Naddei, US2005/0168227**

As for claims 25 and 26, Tegge differs from the claimed invention because he does not explicitly disclose a voltage divider and a first switch.

Naddei discloses a voltage divider (combination of R3,R4,14,R5) having an input side connected to receive a voltage across the battery, and an output side conductively connected to an input of said evaluation unit (IC1a); a first switch electrically (s1)

Art Unit: 2838

connected in series with said voltage divider, said first switch having a first switch position shutting off a flow of current through said voltage divider and a second switch position enables the flow of current through said voltage divider (par. [0070]);

Furthermore, Naddei also shows a low power resistor (F1) and a second switch (Q1)

Naddei is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use a voltage divider and a first switch.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Tegge using a voltage divider and a first switch for advantages such as providing control with battery voltage exceeds a threshold (par.[0070]), as taught by Naddei.

Claims 19 and 20 are obvious in view of the structure and they recite the same elements in a method format.

**10. Claims 21-23,27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tegge in view of Naddei and further in view of Palanisamy, USPAT5,281,919**

As for claims 23,27 and 28, Tegge in view of Naddei differs from the claimed invention because he does not explicitly disclose a voltmeter measuring across the battery and a generator.

Palanisamy discloses and shows in Fig. 1 the battery (108) includes first and a second batteries connected in series, and a voltmeter (112) is connected to measure the voltage across either the first or the second battery and a generator electrically

Art Unit: 2838

connected in parallel with the battery and a voltmeter connected to measure a voltage of said generator (col.3) and storing parameters in memory (col.10, lines 35-37)

Palanisamy is evidence that ordinary skill in the art would find a reason, suggestion or motivation to use a voltmeter to measure across the battery and a generator.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Tegge modified by Naddei using a voltmeter to measure across the battery and a generator for advantages such as providing the ability to determine certain conditions (col.3, lines 4-5), as taught by Palanisamy.

Claims 21 and 22 are obvious in view of the structure and they recite the same elements in a method format.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun Williams whose telephone number is 571-272-9765. The examiner can normally be reached on Mon - Wed, Fri 6:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on 571-272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2838

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arun Williams  
Examiner  
Art Unit 2838

/A. W./  
Examiner, Art Unit 2838

*/Bao Q. Vu/  
Primary Examiner, Art Unit 2838  
June 9, 2008*